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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,390	05/31/2001	Daniel A. Maude	CAO-0090	9880

7590

07/29/2003

CANTOR COLBURN LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

EXAMINER

EVANISKO, LESLIE J

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,390

Applicant(s)

MAUDE ET AL.

Examiner

Leslie J. Evanisko

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/26/03 & 04/28/03.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/04/01 & 02/26/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 1-11 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

Drawings

2. The corrected or substitute drawings were received on February 26, 2003. These drawings are approved by the Examiner.

Response to Amendment

3. The declaration filed on April 28, 2003 under 37 CFR 1.131 is sufficient to overcome the McLean reference (US 6,364,052).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 12-14 and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egosi (US 4,843,958) in view of Merritt (US Des. 349,571). Egosi teaches a method of applying a pattern to an object **E** with a curved surface (such as an egg) including the steps of providing the object, orienting the object relative to a printing device **56**, **56a-56f**, and printing a pattern on the object using the printing device. See, in particular, Figures 1 and 12-17 and column 4, lines 23-28 and columns 9-10. Although Egosi does not necessarily teach the object printed upon is an earplug, note Merritt teaches an earplug having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Egosi to be used to print indicia upon a surface of any similar shaped object,

such as an earplug, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 13-14 and 17, note Egosi teaches the use of a non-impact printing device (i.e., ink jet printer) in column 4, lines 23-28.

With respect to claims 18-19, note that Egosi teaches the desire to have colored images, printed text, and/or advertising information in column 1, lines 34-37 and column 3, lines 50-66.

With respect to claim 20, note that Egosi teaches the use of a plurality of printing devices as recited. See, for example, Figure 2.

With respect to claim 21, although Egosi does not necessarily teach the particular arrangement of the printing devices as recited, note there is no unobviousness in arranging printing devices in any desired arrangement (such as at 120, 180, or 90 degrees relative to each other) in order to provide a simpler mechanism for printing around the circumference of the object.

With respect to claims 22-23, note Egosi teach an alignment device **216** for positioning the object within or near the printing device **56**, **56a-56f** and selectively positioning the object in a plurality of orientations during printing. See, for example, Figures 12-17 and column 10, lines 29-68.

With respect to claims 24-26, note Egosi teach the printing device including at least one nozzle and is associated with a microprocessor and computer unit to allow the printing device to apply the pattern to the object

Art Unit: 2854

from a plurality of positions and orientations. See, in particular, Figures 11-17 and column 3, lines 55-58 and column 9, lines 54-60.

7. Claims 12-15, 18-20, 22, 27, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (US 5,655,453) in view of Merritt (Des. 349,571). Ackley teaches a process of applying a pattern to an object with a curved surface (such as a pellet or other cylindrical shaped object) including the steps of providing the object, orienting the object relative to a printing device, and printing a pattern on the object using the printing device. See, in particular, Figures 2 and 15 and columns 8-12. Although Ackley does not necessarily teach the object printed upon is an earplug, note Merritt teaches an earplug having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Ackley to be used to print indicia upon a surface of any similar shaped object, such as an earplug, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 13-15 and 33-34, note Ackley teaches the use of a non-contact printing device (i.e., ink jet printhead) and an impact printing device in column 9, lines 57-66 and column 12, lines 29-48.

Art Unit: 2854

With respect to claims 18-20 and 36-37, note the teaching in column 6, lines 27-30 and column 8, lines 34-39 of Ackley. Furthermore, note that Merritt shows a number indicia on the ear plug is well known in the art.

With respect to claim 22, note the object of Ackley is oriented by an alignment device **10, 12, 25** for positioning the object within or near the printing device.

With respect to claims 27 and 29, again note that Ackley in view of Merritt render obvious the process as recited. Note, in particular, the above comments with respect to claims 12-26 and that Ackley teaches communicating a pattern from a storage device to the printing device using a controller in column 9, line 57-column 10, line 14.

With respect to claims 30-32, note that Ackley teaches the use of inkjet printers including at least one nozzle for ejecting ink. Although Ackley is silent with respect to the particular details of the inkjet printer structure, note that inkjet printers including ejection of ink from nozzles with vibration as well as inkjet printers using charge electrodes to deflect the ink are well known in the art. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide any known inkjet printer structure of the inkjet device of Ackley as modified by Merritt, as it would simply require the obvious substitution of one known inkjet printhead arrangement for another to provide better printing of the indicia upon the article.

With respect to claim 35, note that Ackley teaches applying a pattern to the side surface of a cylindrical object is well known in the art.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Merritt as applied to claims 12-15, 18-20, and 22 above, and further in view of Roulleau (US 5,142,976). Ackley in view of Merritt teach a process as recited with the exception of the particular type of contact printing device. Roulleau teaches that the use of an impact printing device such as a pad printing device for printing upon curved surfaces is well known in the art. See columns 1-2 and Figure 1 of Roulleau in particular. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide a pad printing device as taught by Roulleau in the printer of Ackley as modified by Merritt, as it would simply require the obvious substitution of one known impact printing device for another.

9. Claims 27-32 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egosi in view of Merritt as applied to claims 12-14 and 17-26 above, and further in view of Carlson (US 5,831,641). Egosi in view of Merritt teach a printing process as recited with the possible exception of having a storage device communicating with the printing device via a controller as recited. Note that clearly the inkjet printer of Egosi is associated with some type of controller device to allow it to print indicia at a variety of positions on

the object, as set forth in Figures 11-17 and column 3, lines 55-58 and column 9, lines 54-60 in particular. However, Egosi does not specifically teach the concept of storing the pattern in a storage device and communicating with a printing device via a controller. Carlson teaches a process of inkjet printing on an object including communicating a pattern from a storage device to a printing device, with the communicating being preformed by a controller as recited. See column 3, lines 1-50 of Carlson in particular. In view of this teaching, it would have been obvious to one of ordinary skill in the art to include a storage device and communication step as taught by Carlson in the method of Egosi as modified by Merritt to allow for image manipulation and more flexibility in the process of printing of indicia on the object.

With respect to claim 28, note Egosi teaches orienting the printing device relative to the object.

With respect to claim 29, again note the teaching of Carlson in column 3, lines 1-50.

With respect to claims 30-32, note that both Egosi and Carlson teach the use of inkjet printers including at least one nozzle for ejecting ink. Although both Egosi and Carlson are silent with respect to the particular details of the inkjet printer structure, note that inkjet printers including ejection of ink from nozzles with vibration as well as inkjet printers using charge electrodes to deflect the ink are well known in the art. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide any known inkjet

Art Unit: 2854

printer structure of the inkjet device of Egosi as modified by Merritt and Carlson as it would simply require the obvious substitution of one known inkjet printhead arrangement for another to provide better printing of the indicia upon the article.

With respect to claim 34, note the inkjet printer of Egosi is a non-impact printing arrangement.

With respect to claim 35, note the inkjet printer of Egosi includes printing a pattern on a side portion of an object.

With respect to claims 36-37, note that Egosi teaches the desire to have colored images, printed text, and/or advertising information in column 1, lines 34-37 and column 3, lines 50-66. Additionally, note that Egosi teaches the use of a plurality of printing devices as recited. See, for example, Figure 2.

10. Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roulleau (US 5,142,976) in view of Merritt (US Des. 349,571). Roulleau teaches a printing process including forming a pattern of an outer surface of an object, the object having two opposing end surfaces and a side surface extending therebetween, the method comprising printing a first pattern on the side surface and printing a second pattern on one of the opposing end surfaces. See Figure 1 and columns 2-3 in particular. Again, although the object being printed is not an earplug as recited, note Merritt teaches an earplug having indicia provided thereon is well known in the art. See, in

Art Unit: 2854

particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Roulleau to be used to print indicia upon the surfaces of any similar shaped object, such as an earplug, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claim 39, note Roulleau teaches that the first pattern is applied with a first printing device **12, 13** and the second pattern is applied with a second printing device **8, 9**.

Response to Arguments

11. Applicant's arguments filed February 26, 2003 and April 28, 2003 have been fully considered but they are not persuasive of any error in the above rejections.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, although Merritt merely shows an earplug with indicia provided thereon and is silent with respect to whether the indicia is

Art Unit: 2854

printed, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art to use a printing arrangement to print the indicia upon the earplug, since printing is a well known way of applying indicia to articles. Furthermore, each of Egosi and Ackley teach printing arrangements for printing relatively small objects having curved surfaces. Therefore, it would have been obvious to one of ordinary skill in the art to use the printing process taught by either of Egosi or Ackley to print indicia upon an earplug (i.e., a relatively small article with a curved surface) to provide an earplug with printed indicia that functions as a cheering aid.

In view of this reasoning, the above rejections are deemed appropriate by the Examiner.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on


Art Unit: 2854

the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(703) 308-0786**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Leslie J. Evanisko
Primary Examiner
Art Unit 2854

lje
July 28, 2003